



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,935	11/21/2003	Taewon Son	942-011549-US(PAR)	3517
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 05/17/2007		EXAMINER ROGERS, JAMES WILLIAM	
			ART UNIT 1618	PAPER NUMBER
			MAIL DATE 05/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/719,935

Applicant(s)

SON ET AL.

Examiner

James W. Rogers, Ph.D.

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country. In order to receive this benefit a copy of the foreign priority document translated to English must be present.

### ***Claim Objections***

Claim 7 is objected to because of the following informalities: There are two periods in the claim, the examiner believes the period after "functionality" should have been a comma but correction by applicants is required.

### ***Specification***

The disclosure is objected to because of the following informalities: The disclosure is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors. There are also numerous spelling errors throughout the disclosure such as "xantan" which should be "xanthan gum", "gelan" which should be gellan, guagum which should be guar gum, locastgum more properly known as locust bean gum, Aga which should be Agar. Because the errors are numerous all of the grammatical and spelling errors have not been addressed herein by the examiner, therefore applicants should amend the disclosure carefully so that it conforms with US practice and is free of grammatical and spelling errors. These amendments should contain no new matter.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. There are numerous examples of grammatical errors and spelling errors throughout the claims. For instance in claim 2 line 2 "wherein said the" is grammatically incorrect, and every claim states "one of the hydrogel ingredient" this phrase is considered redundant and unnecessary by the examiner. There are numerous spelling errors throughout the claims such as "xantan" which should be "xanthan gum", "gelan" which should be gellan, guagum which should be guar gum, locastgum more properly known as locust bean gum, Aga which should be Agar. Because the errors are numerous all of the grammatical and spelling errors might not have been found by the examiner therefore applicants should amend the claims carefully so that they conform with US practice and are free of grammatical and spelling errors. These amendments should contain no new matter.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliot et al. (US 2003/0157088 A1).

Elliot teaches compositions containing enzymes (meets the limitation of protein in claim 4) in numerous formulations including hydrogels for use in personal care including topical applications. The compositions can contain all of applicants claimed ingredients within applicants claimed weight percent range including: locust bean gum, xanthan gum, alginates, agars, guar gum, gellan gum, retinol, pine oil (a bio material extracted from pine needles), glycerine and water. See [0043]-[0044],[0065]-[0067],[0077]-[0078]-[0081],[0084],[0088],[0093] and claims. Regarding the limitation that the composition is temperature sensitive and state-changing, it is the position of the examiner that a composition with the same ingredients will inherently have the same temperature sensitivity. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. Thus the claiming of a new use, new function or unknown property which is

inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellico (US 4,291,025) in view of Elliot et al. (US 2003/0157088 A1).

Pellico discloses Agar gel topical compositions prepared by heating (~90-140 °C) and agitating a mixture of agar, diethylene glycol and water are added to solubilize the agar. Upon cooling to the gelation temperature it is converted to a thermally reversible agar gel. See abstract. The gels can comprise further ingredients including vitamins,

amino acids, antibiotics, antibacterials, topical sedatives, humectants and skin penetrating oils. See col 3 lin 67-col 4 lin 4.

Pelico does not disclose all of the numerous ingredients as claimed by applicants, such as the use of the so-called branched gel polymers, natural bio materials and functional additives.

Elliot as in above discloses topical hydrogel compositions comprising numerous ingredients such as polymeric thickeners such as locust bean gum, skin active agents such as retinal, and emollients such as pine oil.

It would have been prime facie obvious at the time of the invention to a person of ordinary skill in the art to modify the thermosensitive hydrogel for topical application disclosed in Pelico and add the polymeric thickeners, skin active agents and emollients disclosed within Elliot. It is generally considered to be prime facie obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose in order to form a composition that is to be used for an identical purpose. The motivation for combining them flows from their having been used individually in the prior art, and from them being recognized in the prior art as useful for the same purpose. As shown by the recited teachings, the instant claims are no more than the combination of conventional components of ingredients useful in topical hydrogel formulations. There is also motivation and advantages of adding the polymeric thickeners, skin active agents and emollients disclosed within Elliot with the hydrogel composition of Pelico to provide 1) a suitable viscosity by using the polymeric thickeners 2) the skin active agent retinol to a person of need of a vitamin A like effect on the skin 3) and softening and smoothing

the skin with emollients. It would be obvious to one with skill in the art that the ingredients within Elliot could be added to the composition of Pelico because both references are drawn to the same field of endeavor, topical hydrogels for personal care and the compositions contain many of the same ingredients, thus since the compositions are quite similar one would expect that the ingredients of one reference could be added to the composition of the other without having a detrimental effect on the composition. It therefore follows that the instant claims define prime facie obvious subject matter.

### **Conclusion**

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

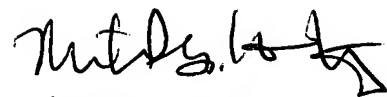
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should



Art Unit: 1618

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Michael G. Hartley", with a stylized flourish at the end.

MICHAEL G. HARTLEY  
SUPERVISORY PATENT EXAMINER